

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

Claim 1 (currently amended)

A glass comprising:

B<sub>2</sub>

Oxide	Mole %
SiO <sub>2</sub>	35 - 75
GeO <sub>2</sub>	0-10
B <sub>2</sub> O <sub>3</sub>	0 - 8
Al <sub>2</sub> O <sub>3</sub>	0 - 8
Li <sub>2</sub> O	>0 - 25
Na <sub>2</sub> O	0 - 60
K <sub>2</sub> O	0 - 6
MgO	0[[- 35]]
Σ BaO, SrO, CaO, ZnO, PbO	0 - 10
TiO <sub>2</sub>	0 - 5
La <sub>2</sub> O <sub>3</sub>	0 - 30
RE <sub>2</sub> O <sub>3</sub>	0 - 12
Y <sub>2</sub> O <sub>3</sub>	>0 - 30
As <sub>2</sub> O <sub>3</sub>	0 - 0.5
F	0 - 5
Sum R <sub>2</sub> O <sub>3</sub> , R=Al, B, La and RE	0 - 40

wherein RE represents rare earth ions, excluding La.

Claim 2 (currently amended)  
properties:

A glass according to claim 1, having the following

Property	Range
$n_d$	$> 1.5$
T(%) at 1550 nm for 1.0 mm	$> 88$
CTE (-30 to +70°C) $\times 10^{-7}/^{\circ}\text{C}$	$\geq 90$ , especially $\geq 110$
E (GPa)	$> 80$
Tg (°C)	$\geq 350$

Claim 3 (currently amended)

A glass according to claim 1, comprising:

Oxide	Mole %
SiO <sub>2</sub>	40 – 70
GeO <sub>2</sub>	0-5
B <sub>2</sub> O <sub>3</sub>	0 – 5
Al <sub>2</sub> O <sub>3</sub>	0 – 5
Li <sub>2</sub> O	$> 0 - 25$
Na <sub>2</sub> O	0 – 35
K <sub>2</sub> O	0 – 5
MgO	0[[ – 25]]
$\Sigma$ BaO, SrO, CaO, ZnO, PbO	0 – 5
TiO <sub>2</sub>	0 – 3
La <sub>2</sub> O <sub>3</sub>	0 – 12
RE <sub>2</sub> O <sub>3</sub>	0 – 10
Y <sub>2</sub> O <sub>3</sub>	$> 0 - 25$

As <sub>2</sub> O <sub>3</sub>	0 – 0.3
F	0 – 3
Sum R <sub>2</sub> O <sub>3</sub> , R=Al, B, La and RE	0 – 40

Claim 4 (currently amended)  
properties:

A glass according to claim 3, having the following

Property	Range
<b>n<sub>d</sub></b>	<b>1.50 - 1.70, especially 1.50 - 1.65</b>
<b>T(%) at 1550 nm for 1.0 mm</b>	<b>&gt; 90</b>
<b>CTE (-30 to +70°C) x 10<sup>-7</sup>/°C</b>	<b>&gt; 100, especially &gt; 110</b>
<b>T<sub>g</sub> (°C)</b>	<b>≥ 400</b>
<b>E [GPa]</b>	<b>&gt; 85</b>

Claim 5 (currently amended)

A glass comprising:

Oxide	Mole %
SiO <sub>2</sub>	40-60
GeO <sub>2</sub>	0-10
B <sub>2</sub> O <sub>3</sub>	0-10
Al <sub>2</sub> O <sub>3</sub>	0-4
Li <sub>2</sub> O	> 0-26
Na <sub>2</sub> O	> 0-26

K <sub>2</sub> O	0-15
MgO	0[[-15]]
Σ BaO, SrO, CaO, ZnO, PbO	0-10
TiO <sub>2</sub>	0-9
ZrO <sub>2</sub>	0-2
La <sub>2</sub> O <sub>3</sub>	0-4
Re <sub>2</sub> O <sub>3</sub>	0-4
Y <sub>2</sub> O <sub>3</sub>	> 0-5
Sc <sub>2</sub> O <sub>3</sub>	0-4
Nb <sub>2</sub> O <sub>5</sub>	0-2
F	0-5
Σ R <sub>2</sub> O <sub>3</sub> , R=Al, B, La, and RE	0-25
As <sub>2</sub> O <sub>3</sub>	0-0.5

wherein RE represents rare earth ions, excluding La.

Claim 6 (currently amended) ' A glass according to claim 5, having the following properties:

Property	Range
n <sub>d</sub>	> 1.5
T(%) at 1550 nm for 1.0 mm	> 88
CTE (-30 to +70°C) x 10 <sup>-7</sup> /°C	≥ 90
E (GPa)	> 80
T <sub>g</sub> (°C)	≥ 350

Claim 7 (currently amended)

A glass according to claim 5 comprising:

Oxide	Mole %
SiO <sub>2</sub>	45-55
GeO <sub>2</sub>	0-5
B <sub>2</sub> O <sub>3</sub>	0-8
Al <sub>2</sub> O <sub>3</sub>	0-2
Li <sub>2</sub> O	>0-17
Na <sub>2</sub> O	>0-19
K <sub>2</sub> O	0-6
MgO	0[[-13]]
Σ BaO, SrO, CaO, ZnO, PbO	0-5
TiO <sub>2</sub>	0-5
ZrO <sub>2</sub>	0-1
La <sub>2</sub> O <sub>3</sub>	0-3
RE <sub>2</sub> O <sub>3</sub>	0-3
Y <sub>2</sub> O <sub>3</sub>	>0-4.5
Sc <sub>2</sub> O <sub>3</sub>	0-3
Nb <sub>2</sub> O <sub>5</sub>	0-1
F	0-3
Σ R <sub>2</sub> O <sub>3</sub> , R=Al, B, La, and RE	0-15
As <sub>2</sub> O <sub>3</sub>	0-0.3

B1  
Cont

Claim 8 (currently amended)  
properties:

A glass according to claim 7, having the following

Property	Range
$n_d$	1.50-1.70
T(%) at 1550 nm for 1.0 mm	> 90
CTE (-30 to +70°C) $\times 10^{-7}/^{\circ}\text{C}$	$\geq 100$
T <sub>g</sub> (°C)	$\geq 400$
E [GPa]	> 85

*B1  
Chart*

Claim 9 (currently amended)

A glass comprising:

Oxide	Mole %
SiO <sub>2</sub>	45.0-58.0
B <sub>2</sub> O <sub>3</sub>	0.0-5.0
Al <sub>2</sub> O <sub>3</sub>	0.0-3.0
Li <sub>2</sub> O	6.5-16.5
Na <sub>2</sub> O	7.0-24.0
K <sub>2</sub> O	0.0-12.0
MgO	0.0[[-8.0]]
CaO	0.0-8.0

SrO	0.0-8.0
BaO	0.0-8.0
TiO <sub>2</sub>	0.0-12.0
ZrO <sub>2</sub>	0.5-5.5
Ta <sub>2</sub> O <sub>5</sub>	0.0-1.0
Gd <sub>2</sub> O <sub>3</sub> + La <sub>2</sub> O <sub>3</sub> + Y <sub>2</sub> O <sub>3</sub>	2.70-3.30
As <sub>2</sub> O <sub>3</sub>	0.0-0.15

wherein RE represents rare earth ions, excluding La.

*B1*  
**Claim 10 (currently amended)** A glass according to claim 9, having the following properties:

Property	Range
<b>n<sub>d</sub></b>	<b>&gt; 1.5</b>
<b>T(%) at 1550 nm for 1.0 mm</b>	<b>&gt; 88</b>
<b>CTE (-30 to +70°C) x 10<sup>-7</sup>/°C</b>	<b>≥ 90</b>
<b>E (GPa)</b>	<b>&gt; 80</b>
<b>T<sub>g</sub> (°C)</b>	<b>400-485</b>

**Claim 11 (currently amended)** A glass according to claim 9, comprising:

Oxide	Mole %
SiO <sub>2</sub>	46.0-52.0
Al <sub>2</sub> O <sub>3</sub>	0.0-1.5
B <sub>2</sub> O <sub>3</sub>	0.0-1.0
Li <sub>2</sub> O	7.0-16.0
Na <sub>2</sub> O	7.0-20.0
K <sub>2</sub> O	4.0-12.0
MgO	0.0[[-7.5]]
CaO	0.0-7.5

SrO	0.0-7.5
BaO	0.0-7.5
TiO <sub>2</sub>	1.0-10.5
ZrO <sub>2</sub>	1.5-5.0
Ta <sub>2</sub> O <sub>5</sub>	0.3-0.7
La <sub>2</sub> O <sub>3</sub> + Gd <sub>2</sub> O <sub>3</sub> +Y <sub>2</sub> O <sub>3</sub>	2.6-2.9
As <sub>2</sub> O <sub>3</sub>	0.0-0.15

Claim 12 (currently amended) A glass according to claim 11, having the following properties:

Property	Range
<b>n<sub>d</sub></b>	<b>1.50 - 1.70</b>
<b>T(%) at 1550 nm for 1.0 mm</b>	<b>&gt; 88</b>
<b>CTE (-30 to +70°C) x 10<sup>-7</sup>/°C</b>	<b>&gt; 100</b>
<b>Tg (°C)</b>	<b>415-480</b>
<b>E [GPa]</b>	<b>&gt; 80</b>

Claim 13 (withdrawn) An interference filter comprising a glass substrate having at least two interference layers coated thereon, wherein the glass substrate is a glass according to claim 1.

Claim 14 (withdrawn) An interference filter comprising a glass substrate having at least two interference layers coated thereon, wherein the glass substrate is a glass according to claim 5.



**Claim 15 (withdrawn)** An interference filter comprising a glass substrate having at least two interference layers coated thereon, wherein the glass substrate is a glass according to claim 9.

**Claim 16 (withdrawn)** A fiber optic system comprising a light source, a fiber optic transmission component, a receiver of transmitted radiation and an interference filter comprising a glass substrate having at least two interference layers coated thereon, said glass substrate comprising a glass according to claim 1.

**Claim 17 (withdrawn)** A fiber optic system comprising a light source, a fiber optic transmission component, a receiver of transmitted radiation and an interference filter comprising a glass substrate having at least two interference layers coated thereon, said glass substrate comprising a glass according to claim 5.

**Claim 18 (withdrawn)** A fiber optic system comprising a light source, a fiber optic transmission component, a receiver of transmitted radiation and an interference filter comprising a glass substrate having at least two interference layers coated thereon, said glass substrate comprising a glass according to claim 9.

**Claim 19 (withdrawn)** A process for making a glass according to claim 1, comprising melting raw materials corresponding to oxides in the glass, refining a resultant glass melt, casting the melt in a mold and optionally annealing.

**Claim 20 (withdrawn)** A process for making a glass according to claim 1, comprising casting into a mold a glass melt produced from raw materials corresponding to oxides in the glass.

Claim 21 (**withdrawn**)      A process for making a glass according to claim 5, comprising casting into a mold a glass melt produced from raw materials corresponding to oxides in the glass.

Claim 22 (**withdrawn**)      A process for making a glass according to claim 9, comprising casting into a mold a glass melt produced from raw materials corresponding to oxides in the glass.

Claim 23 (**withdrawn**)      A demultiplexing optical component comprising the interference filter of claim 13.

Claim 24 (**withdrawn**)      A demultiplexing optical component comprising the interference filter of claim 14.

Claim 25 (**withdrawn**)      A demultiplexing optical component comprising the interference filter of claim 15.

(B1) Claim 26 (**withdrawn**)      A method of demultiplexing, comprising passing an optical signal of multiple wavelengths through a demultiplexing optical component according to claim 23.

Claim 27 (**withdrawn**)      A method of demultiplexing, comprising passing an optical signal of multiple wavelengths through a demultiplexing optical component according to claim 24.

Claim 28 (**withdrawn**)      A method of demultiplexing, comprising passing an optical signal of multiple wavelengths through a demultiplexing optical component according to claim 25.